

Create a database:

```
CREATE DATABASE youtube_streaming;
```

Activate database:

```
use youtube_streaming;
```

Overview of data table:

```
select *from youtubers;
```

Key Performance Indicators (KPIs)

--Q1:What is the average subscriber growth rate by country top 10 channels?

```
select top 10 avg(cast(Suscribers as bigint)) as Avg_sub_growth,  
Country from youtubers  
group by Country  
order by avg(cast(Suscribers as bigint)) desc;
```

Q1	
Avg_sub_growth	Country
26800000	Ecuador
24164730	India
24151461	Unknown
21900000	El Salvador
21475000	Francia
21387713	Estados Unidos
21072727	Pakistán
20962500	Colombia
20076923	Filipinas
20011111	Tailandia

--Q2:Calculate top 10 total subscribers for each categories by country?

```
select top 10 Country, Categories, count(Username) as  
Total_Subscribers  
FROM youtubers  
GROUP BY Country, Categories  
ORDER BY count(Username) desc;
```

Q2		
Country	Categories	Total_Subscribers
India	NULL	129
Estados Unidos	NULL	67
Estados Unidos	Música y baile	53
India	Música y baile	42
Unknown	NULL	35
Unknown	Animación, Juguetes	28
Estados Unidos	Animación, Videojuegos	19
India	Noticias y Política	19
Unknown	Música y baile	18
Estados Unidos	Animación, Humor	17

--Q3: Calculate top 10 total visits for each categories by country?

```
select top 10 count(Visits) as Total_visitors, country from youtubers
group by Country
order by count(Visits) desc;
```

Q3	
Total_visitors	country
293	Estados Unidos
241	India
171	Unknown
64	Brasil
58	México
38	Indonesia
25	Rusia
18	Tailandia
16	Colombia
13	Filipinas

Exploratory Data Analysis

--Q1: Find the total number of subscribers for channels from India?

```
select sum(cast(Suscribers as bigint)) as Total_suscribers from
youtubers where Country = 'India';
```

EDA Q1

Total_suscribers

5823700000

--Q2: List all categories and the total number of channels in each category?

```
select Categories, count(*) as Number_of_Channels from youtubers  
group by Categories;
```

EDA Q2	
Categories	Number_of_Channels
Videojuegos, Juguetes	3
Coches y vehículos	2
Fitness, Salud y autoayuda	3
Comida y bebida, Salud y autoayuda	1
Juguetes	10
Animación	22
Ciencia y tecnología	14
DIY y Life Hacks	3
Comida y bebida, Juguetes	1
Noticias y Política	36
Música y baile, Juguetes	1
Animación, Humor, Juguetes	1
Diseño/arte	1
Juguetes, Coches y vehículos	4
NULL	306
Música y baile	160
Educación	24
Diseño/arte, Belleza	1
Música y baile, Películas	41
Vlogs diarios	37
Videojuegos, Humor	17
Animación, Humor	27
Videojuegos	19
Música y baile, Animación	16
Películas, Videojuegos	8
ASMR, Comida y bebida	1
Viajes, Espectáculos	1
Películas	24
Películas, Animación	61
Fitness	2

Animación, Videojuegos	34
Belleza, Moda	1
Humor	10
Películas, Humor	34
Animales y mascotas	2
Juguetes, DIY y Life Hacks	1
Películas, Juguetes	9
Educación, Juguetes	2
Moda	2
Animación, Juguetes	29
ASMR	1
Diseño/arte, DIY y Life Hacks	1
Comida y bebida	12
Deportes	8
DIY y Life Hacks, Juguetes	1
Música y baile, Humor	6

--Q3: Find the top 5 channels with the highest number of visits/views?

```
select top 5 Username, Visits
from youtubers order by Visits desc;
```

EDA Q3	
Username	Visits
VijayTelevision	99500
janesergo	99500
LittleBabyBum	99000
BBC	9900
vladandnikiarab2	982900

```
--Q4: Calculate the average number of likes per channel by country?
select Country, avg(cast(Likes as int)) as Average_Likes from
youtubers
group by Country
order by avg(cast(Likes as int)) desc;
```

EDA Q4	
Country	Average_Likes
El Salvador	707600
Iraq	140600
Argentina	132979
Somalia	98500
Reino Unido	95200
Estados Unidos	93794
Rusia	81187
México	64865
Colombia	55939
India	52856
Turquía	34364
Japón	32308
España	30625
Francia	29759
Arabia Saudita	29025
Brasil	27020
Filipinas	25309
Perú	20200
Indonesia	19524
Argelia	14400
Tailandia	8298
Ecuador	4300
Unknown	2957
Jordania	1900
Egipto	1502
Pakistán	757
Singapur	639
Bangladesh	349
Marruecos	97

--Q5: Identify the channel with the highest number of comments but with visits/views less than 10 million.

```
select top 1 Username, Comments
from youtubers
where cast (Visits as float) < 10000000
order by cast(Comments as int) desc;
```

EDA Q5	
Username	comments
BispoBrunoLeonardo	154000

--Q6: List channels that have 'Educación' in their categories and more than 100,000 subscribers.

```
select Username, Suscribers from youtubers
where Categories LIKE '%Educación%' AND Suscribers > 100000;
```

EDA Q6	
Username	Suscribers
CoComelon	165500000
infobellshindirhymes	55700000
infobellstamilrhymes	29500000
infobellstelugurhymes	29400000
khangsresearchcentre1685	21700000
MrVivekBindra	21100000
kurzgesagt	21100000
KiddiestvHindi	20800000
#NAME?	20600000
Blippi	18600000
zappytoons	17500000
ElReinoAJugar	17500000
Infobellsbengalirhymes	16400000
DearSir	16300000
wifistudy	16000000
ShriPrashant	15500000
A2Motivation	15500000
studyiqofficial	15200000

infobellskannadarhymes	14700000
TheInfographicsShow	13400000
knowledgetvhindi001	13200000
EnglishConnectionByKanchan	12800000
NasDaily	12600000
OumWalidcuisine	12200000
UTKARSHCLASSES13	11900000
BeAmazed	11700000

--Q7: Determine the rank of channels based on the number of likes, showing the top 10.

```
select top 10 Rank, Username, Likes
from youtubers
order by Likes desc;
```

EDA Q8		
Rank	Username	Likes
729	DesiGamers_	99700
535	DylandPROS	996
604	PlayStation	995
64	IshtarMusic	994
192	worldstarhiphop	993
674	TommyInnit	99000
992	BeAmazed	9900
768	onlinejobRk	99
470	jordanmatter	98500
991	JoeHattab	98500

--Q8: Find the total number of subscribers and total visits/views for channels in the 'Música y baile' category.

```
select sum(cast(Suscribers as bigint)) as Total_Subscribers,
sum(cast(Visits as bigint)) as TotalVisits
from youtubers
where Categories = 'Música y baile';
```

EDA Q7	
Total_Subscribers	TotalVisits
4293900000	59902100

--Q9: Find channels with no comments but more than 1 million visits/views.

```
SELECT Username, Visits
FROM Youtubers
WHERE ISNUMERIC(Comments) = 1 AND CAST(Comments AS INT) = 0 AND Visits
> 1000000;
```

--Q10: Calculate the average number of comments per subscriber for each category.

```
select Categories, avg(cast(Comments as float) / Suscribers) as
AvgCommentsPerSubscriber
from youtubers
group by Categories;
```

EDA Q 10	
Categories	AvgCommentsPerSubscriber
Videojuegos, Juguetes	1.43E-05
Coches y vehículos	3.43E-05
Fitness, Salud y autoayuda	3.26E-05
Comida y bebida, Salud y autoayuda	5.82E-06
Juguetes	1.68E-07
Animación	2.55E-05
Ciencia y tecnología	8.46E-05

DIY y Life Hacks	3.73E-06
Comida y bebida,	
Juguetes	0
Noticias y Política	2.65E-05
Música y baile,	
Juguetes	0
Animación, Humor,	
Juguetes	0
Diseño/arte	6.97E-06
Juguetes, Coches y	
vehículos	0
NULL	3.73E-05
Música y baile	0.000112478
Educación	7.78E-05
Diseño/arte, Belleza	7.64E-05
Música y baile,	
Películas	2.84E-05
Vlogs diarios	4.37E-05
Videojuegos, Humor	0.000203218
Animación, Humor	0.000187075
Videojuegos	9.23E-05
Música y baile,	
Animación	3.43E-05
Películas, Videojuegos	3.94E-05
ASMR, Comida y	
bebida	2.68E-05
Viajes, Espectáculos	2.40E-06
Películas	7.49E-05
Películas, Animación	4.11E-05
Fitness	3.10E-06
Animación,	
Videojuegos	0.000164018
Belleza, Moda	4.60E-05
Humor	0.000269995
Películas, Humor	6.14E-05
Animales y mascotas	0.000170736
Juguetes, DIY y Life	0

Hacks	
Películas, Juguetes	0
Educación, Juguetes	0
Moda	1.45E-05
Animación, Juguetes	2.16E-08
ASMR	9.74E-06
Diseño/arte, DIY y Life	
Hacks	8.56E-05
Comida y bebida	0.000188201
Deportes	9.60E-06
DIY y Life Hacks,	
Juguetes	0.000109948
Música y baile, Humor	0.000129267